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(74) Agent: **COHEN, Jullus, S.**; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

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(71) Applicant (for all designated States except US): **KONINKLIJKE PHILIPS ELECTRONICS N.V.** [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventor; and

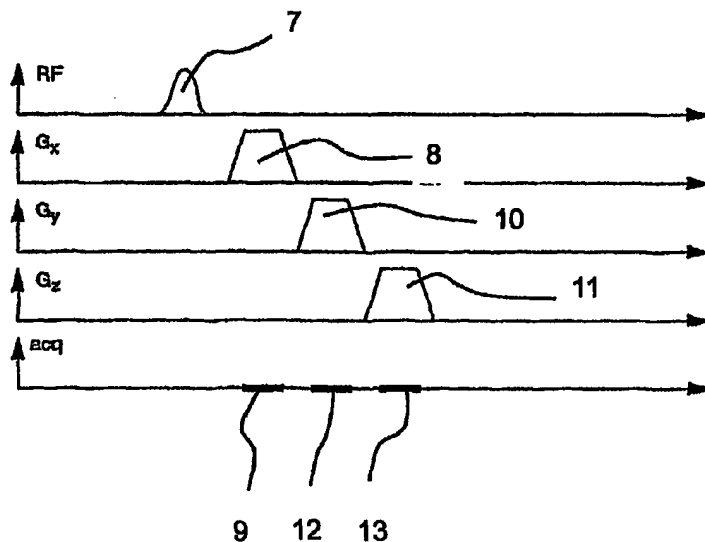
(75) Inventor/Applicant (for US only): **HAM, Cornelis, L., G.** [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

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(54) Title: **AUTOMATED POSITIONING OF MRI SURFACE COILS**



(57) Abstract: A novel magnetic resonance imaging method is described, which is provided for planning a small Field-of-View for a surface coil (3, 5) at the region of interest of a patient lying on a support movable through the bore of a main magnet. A magnetic resonance signal is generated in an examination zone by means of an RF pulse (7). This magnetic resonance signal is subsequently detected by means of the surface coil and under the influence of magnetic field gradients. A non-selective RF-pulse (7) and a first gradient pulse (8) having a linearly independent spatial direction are generated in temporal succession, so that the position of the surface coil (3, 5) in said spatial direction with respect to the isocenter of the main magnet can be determined by the center of gravity of the Fourier transformed response signals detected by the surface coil.

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**Declaration under Rule 4.17:**

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